Lesson Printables

Be a rockstar and only print what you need!

Planners: 2-3

All Zones
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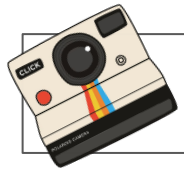
**Printing in the US? Scale to 'fit to printable area' in order to get the best print.*

LESSON 1: Fractions - Identifying fractions in real life

Starter	Main Activity and Input: Fraction pre-assessment. Finding fractions in the classroom.	Plenary
Order Order: What numbers do students think could match each scenario? (Encourage students to use their best estimations.) Write the scenarios in order from largest number to smallest. **To support:** 1. What do students think would be a good guess for all of the scenarios? How do they know when a number is bigger or smaller than another number? **To challenge:** 1. Students could include some of their own scenarios or ideas in the order. E.g., Age, the number of students in your school, etc.	**Input:** *Note, this lesson is a review on how to identify fractions and locate them on a number line. You could use this lesson as a pre-assessment or move on to the next lesson, which dives straight into creating equivalent fractions.* 1. Slide 6 shows a donut that has been partially eaten. How could this be represented using numbers? Ask students to share their thinking. Slide 7 explains that a fraction of the donut has been eaten. What do students already know about fractions? Spend time sharing ideas in order to pre-assess what students already know. 2. Slide 8 explicitly shows that 2/8 represents the fraction of the donut that was eaten. Fractions are parts of a whole. Ask students what information they think the fraction is showing them. Slide 9 defines the numerator (the pieces or parts you are focusing on) and the denominator (the total parts of the whole). 3. Slide 10 shows a collection of balloons. What fractions can students identify? Ask students to share their thinking. Possible fractions and a visual can be found on slide 11. Why is the denominator always the same for each fraction? Slides 12 to 15 model using a number line to show why the total number of pieces in the whole (the denominator) didn't change. Slide 12 uses a ruler to show measuring 10 cm and then dividing the whole number line into 10 equal pieces or 10ths. *Note, this will change when students do the main activity, depending on how many parts are in their whole. For example, if they are looking at eighths, they would draw an 8 cm long line and then divided it into 8 equal parts.* Explain to students that they should draw a line that measures the same length as the number of parts in their whole and then use the centimetres to divide the number line into equal pieces. 4. Slide 16 asks students if they can write any of the fractions in another way. This could be open-ended depending on your class's prior knowledge. Some students might be able to identify equivalent fractions. Others might also be able to write some fractions as decimals or percentages. This is not required in order to meet the lesson objective, it is simply an opportunity for you to pre-assess students' prior knowledge. **Activity: Identifying fractions in real life.** 1. What fractions can students find within the classroom or their class? Allow them to explore any possible ideas. - Colour pens/pencils. - Marbles/blocks/cards. (What fraction of the cards are hearts? What fraction of the blocks are blue?) - Book piles. (What fraction are nonfiction? What fraction are hardback?) - Girls or boys in the class. (What fraction have siblings? What fraction are from the town your school is in?) - Roll a group of dice or flip coins. (What fraction of the dice show even numbers? What fraction of the coins are heads up?) Note, we have also provided some picture visuals for students to use for a more structured setting. **To support:** 1. Write 1 fraction for each group of items. Students could also use a fraction mat for guidance (see printables). **To challenge:** 1. Encourage students to draw their fractions on a number line. 2. Can students identify any equivalent fractions? What else do students know about their fractions? Can they include decimal amount if applicable?	**What's in a name:** What fractions can students find in their name? **Check for understanding:** 1. There are a few possible ways to record fractions in a name. They could include the fraction of vowels, consonants, symmetrical letters (if written in all caps), etc.

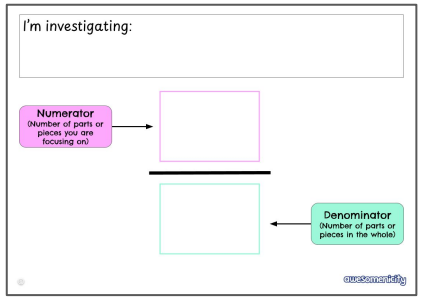
Things that might be useful for this lesson:

- Individual whiteboards:
  - ➔ Help students to record their thinking and share ideas with others.
- Fraction mats:
  - ➔ Help students to organise the numerator and denominators.
- Colour blocks, counters, etc:
  - ➔ Help students to physically create fractions.

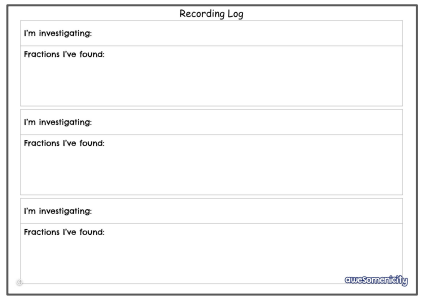


Peek at the Printables:

Fraction Mat



Recording Log

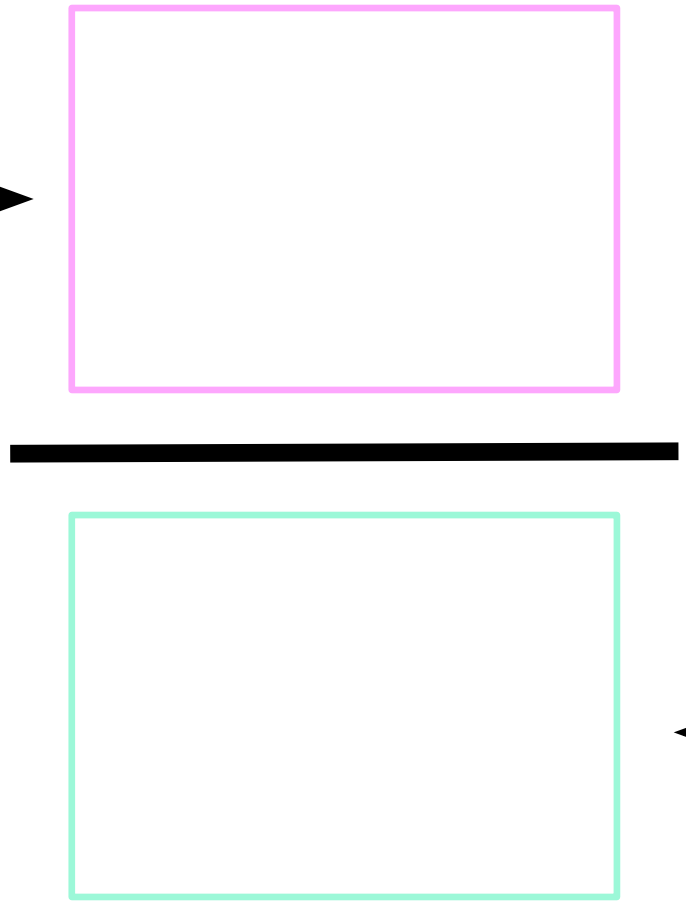


Greener Alternatives:

- ➔ Skip printing any of the printables. Students can record their thinking by taking pictures of the fractions they find or drawing/writing a representation of them in their math books.
- ➔ If you want this to be a more structured activity, create fractions stations that students can move between.

I'm investigating:

Numerator
(Number of parts or pieces you are focusing on)



Denominator
(Number of parts or pieces in the whole)

Recording Log

I'm investigating:

Fractions I've found:

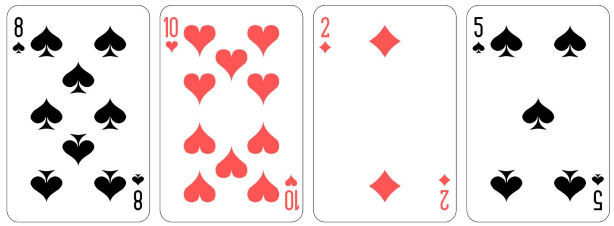
I'm investigating:

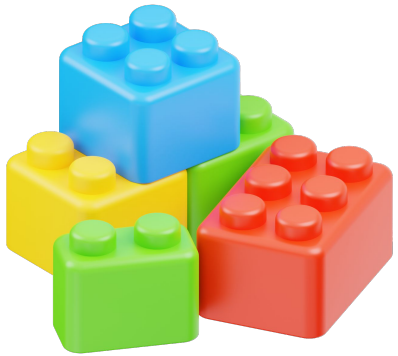
Fractions I've found:

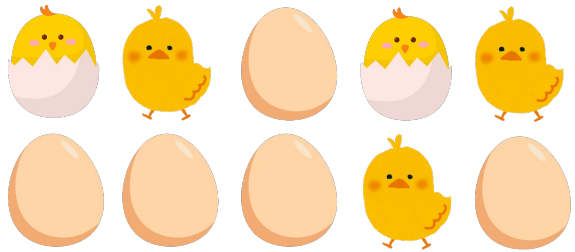
I'm investigating:

Fractions I've found:

Optional Pictures







Optional Picture Answers

Below are possible solutions, not all solutions.

Picture	Possible Fractions
Balls	3/12 or $\frac{1}{4}$ are basketballs 4/12 or ⅓ are tennis balls 2/12 or ⅙ are baseballs 11/12 are spheres
Crayons	4/7 are purple 3/7 are yellow 7/7 are crayons
Blocks	⅖ are green ⅕ has 6 dots ⅗ have 4 dots
Cars/Trucks	⅘ are monster trucks ⅕ is a sports car $\frac{3}{4}$ of the trucks have two colors
Eggs/Chickens	5/10 or $\frac{1}{2}$ haven't hatched 3/10 have no shell 2/10 or ⅕ are still in their shell

Picture	Possible Fractions
Cats	$\frac{1}{4}$ is orange 2/4 or $\frac{1}{2}$ are sleeping 4/4 are cats
Crayons	4/7 are purple 3/7 are yellow 7/7 are crayons
Playing Cards	$\frac{1}{2}$ or 2/4 are black $\frac{1}{4}$ are hearts $\frac{3}{4}$ are even numbers 4/4 cards
Fruit	$\frac{5}{8}$ are lemons 2/8 or 1/4 are blueberries $\frac{1}{8}$ is orange 6/8 or $\frac{3}{4}$ are citrus 8/8 are fruit
Monsters	⅔ have glasses ⅓ is reading a book 3/3 are monsters